

AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0028] with the following paragraph rewritten in amendment format:

[0028] Laser beam 12 preferably has a pulse duration less than 10 pico-seconds. When the pulse duration is longer than 10 pico-seconds, the diffusion of ions produced by the laser beam 12 starts before the end of the laser beam 12. Thus, the charge separation region 28 is not able to grow large enough to accelerate the ions up to a high energy level, which is desired. On the other hand, a pulse duration less than 10 pico-seconds makes for a larger charge separation, thus making a higher electric field, which is required for the production of high-energy particles 20. The laser beam has a repetition rate greater than or equal to about 10^{-3} Hz.